

## **CLAIMS**

1. Apparatus for cleaning liquid holding tanks which include at least sidewalls and a floor and wherein as a minimum both the surface of the liquid and the bottom of the tank are simultaneously cleaned, comprising:
  - (a) a source of high pressure liquid,
  - (b) a venturi having a throat, an inlet port and an outlet port, said venturi being placed in said holding tank beneath the liquid in said tank and with said venturi outlet port forming the bottom of said venturi which faces generally downward towards the floor of said tank,
  - (c) a line for carrying liquid having a first end and a second end, said line being connected at its first end to said source of high pressure liquid, and
  - (d) a nozzle connected to said second end of said line for carrying liquid to receive the high pressure liquid from said source of high pressure liquid, said nozzle being positioned in said venturi to direct the discharge from said nozzle out of said venturi outlet port.
2. Apparatus as claimed in claim 1, further comprising a pump having an inlet and an outlet port, said pump serving as the source of high pressure liquid and providing said high pressure liquid at its outlet port.

3. Apparatus as claimed in claim 2 wherein said pump accepts as liquid at its inlet port the liquid in said holding tank.
4. Apparatus as claimed in claim 3 wherein said pump is located in said pool.
5. Apparatus as claimed in claim 4 wherein said pump is submersible and positioned in said holding tank beneath the surface level of the liquid in said pool.
6. Apparatus as claimed in claim 1 further comprising means for connecting and disconnecting said nozzle to said line to permit interchanging nozzles adapted to provide different nozzle output sprays from said nozzles to remove different sediments and function in different liquid environments.
7. Apparatus as claimed in claim 1 further comprising a shut off valve in series with said line for carrying liquid and means for opening said valve at a first predetermined high level of the liquid in said tank and shutting off said valve at a predetermined low level in said tank.
8. Apparatus as claimed in claim 7 wherein said means for opening and closing said valve includes a float floating on the surface of the liquid in said tank and a link between said valve and said float to cause said valve to open when said float is at said first level and to close when said float is at said second level.

- 9 Apparatus as claimed in claim 1 wherein said line is flexible and has a length that will permit said venturi to reach all areas of the floor of said tank and said nozzle is set at an angle with respect to the floor of the tank other than 90 degrees to provide a sideward thrust to the venturi to cause the venture to move about the floor of said tank.
10. Apparatus as claimed in claim 9 wherein said venturi includes wheels attached to its bottom to facilitate its movement about the floor of said tank
11. Apparatus as claimed in claim 10 further comprising a motor connected to said venturi and to said nozzle to set said nozzle to a plurality of angles other than 90 degrees as well as including 90 degrees with respect to the floor of said tank to permit said venturi to move in a plurality of directions and cover a wide area of the floor of said tank.
12. Apparatus as claimed in claim 11 wherein said motor is powered by liquid under pressure.
- 13 Apparatus as claimed in claim 12 wherein the source of said liquid under pressure is said source of high pressure liquid.